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U.S. CENSUS BUREAU

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JUNE 2002 CONSTRUCTION AT \$820.8 BILLION ANNUAL RATE

Construction put in place during June 2002 was estimated at a seasonally adjusted annual rate of \$820.8 billion, 2.2 (\pm 4.7) percent below the revised May estimate of \$839.0 billion, according to the U.S. Commerce Department's Census Bureau. The June figure is 3.7 (\pm 4.6) percent below June 2001.

During the first 6 months of this year \$394.8 billion of construction was put in place, unchanged (± 3.2 percent) from the same period in 2001.

In constant (1996) dollars, the June annual rate was \$671.5 billion, 2.6 (± 4.7) percent below the revised estimate of \$689.4 billion for May.

PRIVATE CONSTRUCTION

Spending on new residential housing units was at a seasonally adjusted annual rate of \$293.5 billion in June, 0.5 (± 1.6) percent below the revised May estimate of \$295.1 billion. Nonresidential building construction was at a rate of \$165.4 billion, 3.4 percent below the revised May estimate of \$171.2 billion.

PUBLIC CONSTRUCTION

In June, the estimated seasonally adjusted annual rate of public construction put in place was \$197.5 billion, $3.1 (\pm 4.7)$ percent below the revised May estimate of \$203.8 billion.

July 2002 data will be released on September 4, 2002 at 10:00 AM EDT.

EXPLANATORY NOTES

In interpreting changes in the statistics in this release, note that month-to-month changes in seasonally adjusted statistics often show movements which may be irregular. It may take 2 months to establish an underlying trend for total construction and as long as 8 months for specific categories of construction.

The statistics in this release are estimated from several sources and surveys and are subject to sampling variability as well as nonsampling errors including bias and variance from response, nonreporting, and undercoverage. Estimates of the standard errors are provided in Table 4 for selected types of construction. Whenever a statement such as "2.3 (± 3.1) percent above" appears in the text, this indicates the range (-0.8 to +5.4 percent) in which the actual percent change is likely to have occurred. All ranges given are 90 percent confidence intervals. If the range contains zero, it is uncertain whether there was an increase or decrease; that is, the change was not statistically significant. For any comparison cited without a confidence interval, the change is statistically significant. Statistics for the current month are preliminary estimates subject to revision in following months as additional data become available. The average absolute percent changes from preliminary estimate to first revision for the major seasonally adjusted components are as follows: total construction, 0.5 percent; private construction, 0.6 percent; private residential construction, 0.5 percent; private nonresidential construction, 1.1 percent; and public construction, 1.4 percent.

More detailed data will appear in Current Construction Reports, C30/02-6, to be issued later this month. A discussion of sources and reliability of the data appears in Current Construction Reports, C30/02-5.

Our internet address is: http://www.census.gov/c30

This press release is available the day of issue through the Commerce Department's on-line Economic Bulletin Board. For information, call (202) 482-1986.

New monthly detailed types of construction data for 2002 are presented at: http://www.census.gov/const/C30/newtc.html

Table 1. Value of Construction Put in Place in the United States, Seasonally Adjusted Annual Rate

[Billions of dollars. Detail may not add to total due to rounding. Percent changes based on unrounded figures]

Type of construction							_		Percent change Jun 2002 from—	
	Jun ^p 2002	May ^r 2002	Apr ^r 2002	Mar 2002	Feb 2002	Jan 2002	Dec 2001	Jun - 2001	May 2002	Jun 2001
					Curre	nt dollars				
Total construction	820.8	839.0	856.4	855.2	874.3	860.2	841.8	852.6	- 2.2	- 3.7
Private construction ¹	623.3	635.2	656.7	655.3	659.4	651.5	640.8	658.4	- 1.9	- 5.3
Residential buildings ²	404.2 293.5	407.9 295.1	411.4 295.2	413.8 295.4	413.5 293.8	403.3 286.9	395.2 283.1	389.0 280.3	- 0.9 - 0.5	3.9 4.7
1 unit	260.1 33.5	260.5 34.6	260.2 35.0	261.7 33.7	260.0 33.9	251.6 35.4	250.2 32.9	249.8 30.5	- 0.2 - 3.2	4.1 9.7
Nonresidential buildings	165.4	171.2	180.0	178.5	183.2	185.6	184.4	207.1	- 3.4	- 20.1
Industrial	16.8 37.1	16.5 37.9	17.6 41.0	18.5 41.0	19.6 41.7	20.9 44.2	23.0 44.0	31.0 55.0	1.9 - 2.1	- 45.9 - 32.6
Hotels, motels	10.4	11.2	11.3	11.4	12.2	12.3	12.7 58.0	15.0	- 7.1 - 5.3	- 30.7 - 10.1
Other commercial	54.0 8.8	57.0 9.0	61.5 9.0	60.8 8.8	61.5 8.7	61.3 8.4	8.1	60.0 8.7	- 2.3	0.3
Educational	12.5 17.5	13.8 17.2	14.5 16.5	14.0 16.0	14.4 16.2	14.2 15.4	14.3 15.3	12.0 15.5	- 10.0 1.7	3.6 12.9
Miscellaneous buildings	8.6	8.8	8.5	8.1	9.0	9.0	9.0	9.9	- 2.7	- 13.9
Telecommunications	(NA) 3.0	17.3 2.9	17.4 3.4	16.5 3.2	17.2 3.2	17.0 3.0	18.2 3.1	18.6 2.9	(NA) 1.9	(NA) 2.8
Public construction	197.5	203.8	199.7	199.9	214.9	208.7	201.0	194.1	- 3.1	1.7
Housing and redevelopment Industrial	5.4 1.9	5.0 2.1	5.1 2.1	4.8 1.9	5.2 2.3	4.9 1.5	5.3 2.3	4.8 1.5	8.8 - 8.6	13.8 30.1
Educational	61.1	65.4 4.9	62.7 4.8	60.9	63.9 5.1	61.1 5.4	58.1 4.4	52.6 4.3	- 6.5 - 7.2	16.1 5.2
Hospital	31.1	30.9	30.7	31.4	32.4	31.8	32.0	31.7	0.6	- 1.9
Highways and streets	49.6 3.0	51.2 3.1	51.1 2.7	52.4 2.6	61.7 2.5	61.7 2.5	55.3 2.6	57.8 3.0	- 3.2 - 4.7	- 14.2 - 0.2
Conservation and development	7.6	7.5	7.9	8.7	8.7	8.2	7.5	6.6	1.5	15.7
Sewer systems	8.9 7.3	9.7 7.4	9.2 7.1	9.3 6.9	9.9 7.2	9.5 7.3	8.9 7.6	8.7 7.6	- 8.1 - 1.3	2.5 - 3.9
Miscellaneous public	17.0	16.6	16.4	16.0	16.1	14.9	17.2	15.6	2.3	9.0
	1996 dollars									
Total construction	671.5	689.4	705.5	705.3	720.9	709.9	694.1	713.4	- 2.6	- 5.9
Private construction ¹	509.6 328.9	521.0 332.4	540.1 335.9	539.0 337.3	542.7 337.8	536.3 328.9	527.1 322.1	550.6 323.9	- 2.2 - 1.1	- 7.5 1.6
Residential buildings ²	238.9	240.5	241.0	240.8	240.0	234.0	230.7	233.4	- 0.7	2.3
1 unit	211.6 27.2	212.3 28.2	212.4 28.6	213.3 27.4	212.4 27.7	205.2 28.9	203.9 26.8	208.0 25.4	- 0.3 - 3.4	1.8 7.2
Nonresidential buildings	134.2 13.6	139.6 13.4	147.1 14.4	146.3 15.1	149.9 16.0	152.1 17.1	151.0 18.8	171.3 25.6	- 3.9 1.4	- 21.7 - 47.0
Office	30.1	30.9	33.5	33.6	34.1	36.2	36.1	45.5	- 2.5	- 33.9
Hotels, motelsOther commercial	8.4 43.8	9.1 46.5	9.3 50.3	9.4 49.9	10.0 50.3	10.0 50.3	10.4 47.5	12.4 49.7	- 7.5 - 5.8	- 32.1 - 11.8
Religious	7.1 10.1	7.3 11.3	7.3 11.9	7.2 11.4	7.1 11.8	6.9 11.7	6.6 11.7	7.2 9.9	- 2.8 - 10.4	- 1.6 1.6
Hospital and institutional	14.2	14.0	13.5	13.1	13.2	12.6	12.5	12.8	1.2	10.7
Miscellaneous buildings Telecommunications	6.9 (NA)	7.2 16.0	7.0 16.1	6.6 15.3	7.4 15.9	7.4 15.8	7.4 17.0	8.2 17.3	- 3.2 (NA)	- 15.6 (NA)
All other private	2.5 161.9	2.5 168.4	2.9 165.4	2.7 166.3	2.8 178.3	2.5 173.6	2.7 167.0	2.5 162.8	0.8 - 3.8	0.4 - 0.5
Housing and redevelopment	4.4	4.1	4.1	3.9	4.2	4.0	4.3	4.0	8.7	11.2
Industrial	1.5 49.6	1.7 53.3	1.7 51.2	1.5 49.9	1.9 52.3	1.2 50.0	1.9 47.6	1.2 43.5	- 9.1 - 7.0	27.4 13.9
Hospital	3.7	4.0	3.9	4.1	4.1	4.4	3.6	3.6	- 7.6	3.2
Other public buildings	25.2 40.3	25.2 42.0	25.1 42.0	25.7 43.4	26.5 50.8	26.1 51.1	26.2 45.6	26.2 48.4	0.1 - 4.2	- 3.8 - 16.7
Military facilities	2.4 6.6	2.5 6.6	2.2 7.0	2.1 7.7	2.1 7.7	2.0 7.3	2.1 6.6	2.5 5.8	- 5.5 0.3	- 2.8 13.8
Sewer systems	7.8	8.6	8.1	8.3	8.8	8.5	7.9	7.7	- 9.2	0.8
Water supply facilities Miscellaneous public	6.1 14.3	6.2 14.1	6.0 14.0	5.9 13.7	6.1 13.7	6.2 12.8	6.5 14.7	6.5 13.4	- 2.5 1.2	- 5.8 6.4
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NA Not available.

^pPreliminary.

rRevised.

¹Includes the following categories of private construction not shown separately: residential improvements, railroads, electric light and power, gas, petroleum pipelines, and farm nonresidential. ²Includes improvements.

Table 2. Value of Construction Put in Place in the United States, Not Seasonally Adjusted in Current Dollars

[Billions of dollars. Detail may not add to total due to rounding. Percent changes based on unrounded figures]

									Year to date		e
Type of construction	Jun ^p 2002	May ^r 2002	Apr ^r 2002	Mar 2002	Feb 2002	Jan 2002	Dec 2001	Jun 2001	Jun 2002	Jun 2001	Percent change
Total construction	75.0	72.5	68.2	63.4	57.1	58.7	62.6	77.9	394.8	394.8	(Z)
Private construction ¹	56.8	55.1	52.9	49.8	43.6	45.3	48.1	59.7	303.5	308.1	- 1.5
Residential buildings ² . New housing units. 1 unit. 2 units or more. Nonresidential buildings. Industrial. Office. Hotels, motels. Other commercial. Religious. Educational. Hospital and institutional. Miscellaneous buildings. Telecommunications. All other private.	37.9 26.6 23.7 2.9 14.2 1.4 3.1 0.9 4.7 0.7 1.2 1.5 0.7 (NA)	35.9 25.5 22.5 3.0 14.5 1.4 3.3 0.9 4.8 0.7 1.2 1.4 0.8 0.8	33.1 24.0 21.1 2.9 14.8 1.4 3.4 1.0 4.9 0.7 1.2 1.4 0.7	31.0 22.8 20.1 2.7 14.0 1.5 3.3 0.9 4.6 0.7 1.1 1.3 0.7	25.7 19.3 16.8 2.5 13.6 1.4 3.2 1.0 4.4 0.6 1.0 1.3 0.7 1.2	27.4 19.8 17.1 2.7 13.8 1.6 3.4 1.0 4.3 0.7 1.0 1.2 0.7	28.2 20.9 18.3 2.6 14.7 1.9 3.5 0.7 1.1 1.3 0.7 1.6 0.3	36.3 25.4 22.7 2.7 17.9 2.7 4.7 1.3 5.3 0.7 1.1 1.3 0.8 0.8	190.9 138.0 121.3 16.7 85.0 8.7 19.8 27.8 4.1 6.6 8.1 4.2 (NA)	179.4 130.3 115.5 14.8 101.6 15.3 27.9 7.4 29.1 3.9 5.8 7.6 4.8 9.1 1.3	6.4 6.0 5.0 13.5 - 16.4 - 43.4 - 29.0 - 23.6 - 4.3 5.4 14.3 7.2 - 10.8 (NA) 11.5
Public construction	18.2	17.3	15.3	13.6	13.4	13.4	14.4	18.1	91.3	86.8	5.2
Housing and redevelopment Industrial Educational Hospital Other public buildings Highways and streets Military facilities Conservation and development Sewer systems Water supply facilities Miscellaneous public	0.5 0.2 5.7 0.4 2.7 5.0 0.3 0.6 0.8 0.6	0.4 0.2 5.3 0.4 2.6 4.6 0.3 0.6 0.8	0.4 0.2 4.8 0.4 2.6 3.5 0.2 0.6 0.7 0.6 1.3	0.4 0.2 4.3 0.4 2.8 0.2 0.7 0.7 0.5 1.1	0.4 0.2 4.3 0.4 2.4 2.8 0.2 0.6 0.7 0.5	0.4 0.1 4.2 0.4 2.4 3.0 0.2 0.6 0.7 0.5	0.4 0.2 4.3 0.4 2.5 3.3 0.2 0.6 0.7 0.6 1.3	0.4 0.1 4.9 0.4 2.7 5.9 0.3 0.6 0.8 0.7	2.4 0.9 28.6 2.4 15.1 21.6 1.3 3.7 4.4 3.3 7.4	2.3 0.7 24.5 1.9 14.9 22.9 1.4 3.3 4.1 3.3 7.5	5.7 33.3 17.0 25.5 1.3 - 5.6 - 3.1 12.8 6.0 2.6 - 1.5

NA Not available.

^pPreliminary.

rRevised.

Z Less than 0.05 percent.

¹Includes the following categories of private construction not shown separately: residential improvements, railroads, electric light and power, gas, petroleum pipelines, and farm nonresidential.

²Includes improvements.

Table 3. U.S. Census Bureau Composite Fixed-Weighted (1996 Weights) Price Index and Implicit Price Deflator

[1996 = 100]

Period	F	ixed-Weighted Inde	ex	Implicit Price Deflator			
	2000	2001	2002	2000	2001	2002	
January February. March April May June July August September October November. December. Annual	114.0 114.5 114.8 115.1 115.6 115.8	117.8 118.3 118.7 118.8 119.2 119.7 119.6 119.9 120.2 120.9 121.1 121.5	121.5 121.5 121.3 '121.3 '121.6 P122.3	113.3 113.8 113.9 114.6 114.9 115.1 115.8 115.9 116.4 116.7 117.1	117.9 118.3 118.6 118.7 119.0 119.5 119.4 119.7 120.0 120.8 121.0 121.2	121.2 121.2 121.3 121.4 121.7 P122.3	

Preliminary.

rRevised.

Note: The fixed-weighted price index is a weighted average of the individual price index series used to deflate the Value of Construction Put in Place (VIP) series. In calculating the index, the weights (the composition of current dollar VIP in 1996 by category of construction) are held constant. Consequently, the index reflects only changes in prices. The implicit price deflator is a derived ratio of total current to constant dollar VIP (multiplied by 100). It is the average of the individual price indexes used in the deflation of VIP, but the prices are weighted by the composition of VIP each period. As a result, the implicit price deflator reflects not only changes in prices, but also changes in the composition of VIP, and its use as a measure of price change is discouraged.

Table 4. Relative Standard Errors and Coefficients for Standard Errors of Changes

	Relative	e standard error (p	Coefficient for changes		
Type of construction	Monthly estimate	Year-to-date estimate	Annual estimate	Month-to-month change (k1)	Year-to-date change (k2)
Total construction	2	2	1	.03	.02
Private construction	3	2	1	.04	.03
Residential buildings New housing units 1 unit. 2 units or more	5 2 2 4	3 2 2 4	2 1 2 3	.06 .01 .01 .03	.04 .02 .02 .04
Nonresidential buildings Industrial Office Hotels, motels Other commercial Religious Educational Hospital and institutional Miscellaneous buildings	2 3 4 7 5 9 7 6 7	1236385555	1 2 2 5 2 5 5 5 4	.02 .04 .05 .09 .06 .12 .10	.01 .03 .04 .08 .04 .11 .07 .07
Public construction	2	1	1	.03	.01
Housing and redevelopment Industrial Educational Hospital Other public buildings Highways and streets Military facilities Conservation and development Sewer systems Water supply facilities Miscellaneous public	8 (NA) 3 6 3 4 (NA) 4 6 8	5 (NA) 2 5 2 2 (NA) 2 3 4 5	4 (NA) 2 4 2 2 (NA) 2 3 3 3	.11 (NA) .04 .08 .04 .05 (NA) .06 .08 .11	.07 (NA) .03 .07 .03 .03 (NA) .03 .04 .06

NA Not available.

Note: All statistics are based upon 2001 data. The coefficient (k1) for the month-to-month change is applicable to change from the previous month and change from the same month a year ago.

The standard errors (SE) for month-to-month and year-to-date changes may be approximated by the following formula with the appropriate coefficient shown in Table 4:

SE(change) = (k1 or k2) (100 + % change shown in table).

For example, suppose Table 1 showed that private 'office' construction increased 9 percent from last month. The standard error of the 9 percent increase is about equal to 9 percentage points:

SE(9% increase) = (.05)(100+9) = (.05)(109) = 5%

Once the standard error is available, one can construct a 90 percent confidence interval of the change by multiplying the standard error by 1.6. In the above example, an approximate 90 percent confidence interval of the 9 percent increase for private 'office' construction would be between:

0 and 18 percent (9% plus or minus 9% (5% x 1.6)).